

## **Land Where Russia Begins**

Murmansk region is by right considered to be the Land, where Russia begins, and the Northern gates of our country. Important geopolitical position, available all-the-year-round navigation with direct access to international shipping commercial routes combined with source of mineral and raw materials unique in its composition and reserves has made it possible to form large industrial complex within the territory of the region.

The region provides 100% of the need of Russia in apatite concentrate, to a considerable extent – in nickel, copper, iron-ore concentrate and other minerals. The region applies to the number of the most power-possessed territories of the country and it gives to the country every sixth ton of food fish products produced in Russia.

The region has stable volume of industrial production. Large investments are allocated for the development of ore fields – OAO (Public joint stock company) “Apatity”, OAO “Kolskaya GMK (Mining & Smelting company), OAO “Olkon”, expansion of capacities in the production of aluminium in Kandalaksha aluminium works of the company OAO “SUAL”, for the development of Murmansk marine commercial port and Murmansk marine fishing port.

The consumer’s market of goods and services is in dynamic progress. The banking system in the region functions quite stable ensuring high rate of crediting for corporations and the population. The wages increase, the increase in cash income of the population, in pensions are visible.

Large investment projects of the Federal importance are implemented in Murmansk region. Among them – the complex development of Murmansk transport junction, of oil and gas branch in the Arctic, development of new mineral deposits (“Fedorova tundra”, “Oleny ruchey”), building of new terminals in Murmansk marine commercial port, replenishment of the fleet with vessels including ice-class vessels for the Northern shipping route.

## **The Region of Special Purpose**

The economy of Murmansk region is based on rich source of mineral and raw materials of the Kola peninsula, on biological resources of the Barents sea as well as on the deep-sea port of all-the-year round navigation with direct access to the World ocean. These factors have predetermined the way of the region development, its strategic importance for Russia.

## **Geographical Position**

Murmansk region is one of the largest and most economically developed regions of the European North of Russia. The region is situated on the Kola peninsula washed by the Barents and White seas and it has the area of 144,9 thous.sq.km. Almost all its territory lies beyond the Polar circle. Its maximum length from the north to the south is 400 km, from the west to the east is 500 km. Murmansk region borders on two states – Norway and Finland in the west, in the south – on the Karelia Republic, and it is a member of the Barents Euro-Arctic region.

The climate : Murmansk region lies in the zone with the Arctic marine climate. The average air temperature of may years in January is -5,3 C, in July - +14,1 C. The average annual precipitation rate is from 350 to 1000 mm.

The population: the number population in the Murmansk region in 2010 estimates 836,7 thousand.

The region is rich in different natural resources. Over 60 large deposits of different types of minerals, most valuable of them are the ores of phosphorus, titanium, iron, aluminium, copper, nickel, zirconium and other rare metals, have been opened on the Kola peninsula. The deposits of mica, ceramic raw materials and raw materials for construction, decorative stone, semi-jewels and stones for hand-made articles are considerable.

**Big oil and gas deposits have been opened in the Barents sea shelf, among which Stockman gas condensate fields with the capacity of 3,0 billion Cub.m of gas has become world-known. Development of these unique fields in future shall enable to meet the needs of all North-West of Russia in gas for many years.**

## **The Land History**

Settlement of Kola peninsula has started long time ago. The discovered sites of the Stone Age refers to XI-VII thousand years B.C.

The history of Murmansk region is closely connected with opening up of the Russian European North. In XII century the first Russian people of Novgorod lands by origin begin to visit the sea-coast of the White sea (Belomorje). From XV century the Russians appear on the Peninsula as permanent inhabitants, the Russian settlements arise in Umba and Varzuga on Tersky shore. In 1565 Kola is firstly mentioned in the historical sources.

In XIX century the intensive settling of Murmansk sea-coasts started. In 1883 Kola (Kolsky) uyezd (district) was formed with the center in Kola. In 1899 Aleksandrovsk (now – Polyarny) becomes uyezdny (district) town – new town settlement and port.

On 21 September (4 October) 1961 settlement Murman was declared as town Romanov-na-Murmane (Romanov-on-Murman) which became Murmansk after the February revolution of 1917. Since that time the town is the center of political, economic and cultural life of the Kola Peninsula.

From 1920 the new period in the history of the Kola Peninsula begins – the conversion of it from the remote outskirts into the developed industrial and commercial district.

On the basis of Khibiny fields the industry on the fertilizers production started to develop rapidly. City Khibinogorsk later on was renamed into Kirovsk and became the center of the forming branch. The resources of nickel ores opened in Monchetundra, were the basis for establishing the non-ferrous metallurgy. Copper and nickel integrated plant “Severonickel” was put into operation in Monchegorsk in 1938.

More than two centuries Murmansk land was part of Arkhangelsk region, from 1927 it was included into Leningrad region. Murmansk region became independent on 28 May 1938.

The Kola North has played significant role in strengthening the defence potential of the country. The Northern Navy flotilia organized in 1937 was reformed into the North fleet.

In the years of the Great Patriotic war the active fighting in polar regions was held in Murmansk and Kandalaksha directions. In 1944 special medal “For the defence of the Soviet polar regions” was introduced and 350 thousand people were awarded with it. In 1985 city Murmansk was awarded the honorary title City-hero.

At present there are 16 cities, 16 settlements of town type, 133 agricultural settlements in Murmansk region. There five districts in the region : Kovdorsky, Kolsky, Lovozersky, Pechengsky, Tersky districts. Seven ZATO (Closed administrative and territorial entities) are situated within the territory of the region.

Murmansk region is multinational. Three districts – Kovdorsky, Kolsky, Lovozersky are the districts of compact residence of the indigenous nations of the North (NIN)– Saami. Based on the statistical data as on 01.01.2006 , 1890 people – representatives of NIN live in Murmansk region. Among them: 1791 are Saami, 109 are other nations of the North (Nenets, Evenks, Mansi).

### **Nature. Tourist Potential of the Land.**

Murmansk region occupies the territory of the Kola Peninsula and adjoining to it in the west and south-west part of the mainland. Almost all the territory lies beyond the Northern Polar circle. In the north and north-east it is washed by the Barents sea, in the east and south – by the White sea.

In the central part of the Peninsula lies massif of Khibini mountains – the highest and probably the most famous and attended by the tourists area of the Kola Peninsula. Steep slopes, large circuses, snow lying in the hollows and clefts all-the-year-round provide great appearance to not high northern hills. The hills rise sharply over the surrounding plain without any half-tones. Three mountain skiing areas are situated in the same latitude. The most famous of them lies in the environs of the city Kirovsk, which is by right reputed the center of mountain skiing in the region. Here people joke: small townfolks can ski before they can walk. Mountain skiing center as well as Kirovsk has its own indisputable advantages. First of all – it's reasonable price and the northern exotics. The convenient position in the aspect of transport contribute to its popularity growth. The distance from Kirovsk to Moscow is 1930 km, to Saint-Petersburg is 1250 km. The specific climate makes it possible to go in for mountain skiing from December to mid May while the skiing season in all other mountain skiing health resorts is already closed.

To the west of the Khibini mountains, closer to the state borderline stretches the chain of non-high hills (mountains) Chuna, Monche, Volchyi and Salnye tundras; to the west of the Khibinis – Lovozerskye tundras (1000 m high). This system of heights forms the Central mountainous area. But the bigger part of it is flat country.

In number and beauty of rivers and lakes Murmansk can easily compete with the neighbouring Karelia. Thousands of lakes, connected by short channels are scattered among the hills. The number of small lakes is enormous- there are about hundred thousands in the region. The rivers of Murman form numberless sand spits and rapids, the current there is very fast. No wonder that water and fishing tourism are much developed in the region. Annually over one-and-half thousand tourists from 38 countries visit the Kola Peninsula to whip salmon.

There are legends about rich in fish northern rivers of the Kola Peninsula. This is a true Paradise for a fisherman. Perch, roach, sig, salmon, kumzha, trout, loach, palia, pike, eel-pot can be found in thousands of rivers and lakes. The most popular species among fishermen are salmon ones, especially salmon, or Atlantic salmon, passing kumzha, lake and river trout.

To catch fish free of charge one can everywhere except salmon rivers and their passageway lakes, as well as except marketable fish areas, reserves, fish nurseries and fish farms. Reserved salmon rivers are : Umba, Barzuga, Kitsa, Ponoj, Yokanga, Eastern and Western Litsa, Kharlovka, Rynda, Kola, Tuloma. Varzuga is reputed the best river for fishing on Tersky shore of the Kola Peninsula. For the beginners it is the best variant to try oneself in salmon fishing: nobody has left this place without any fish caught. 17 tourist camps for foreign and Russian tourists are located in the mouth of spawning rivers in the territory of the region. They are supplied with everything required for good fishing. The licenced fishing of salmon is open in the rivers within the period from June 15 till September 15.

Mountains, lakes, two seas, thousands of rivers – all that is of great interest for tourists all over the world. In Murman almost every type of tourism is possible except “beach” one, - sports fishing, hunting, water, mountain tourism, alpinism, mountain-skiing, rafting, diving, kiting, walking, skiing and bicycle tours.

Only from here you can get aboard atomic ice-breaker to travel to the North Pole; you can catch the queen of the northern rivers – salmon or crab at sea; to visit the deepest borehole in the world; to see the beauties of underwater world of the White and the Barents seas; to cross three countries by ski; to get acquainted with the mode of life and culture of the ancient nation – Saami.

## **Population.**

The population of Murmansk region estimates about 857 thousand people. In comparison with other regions of our country, the region is more urbanized – 91,3 % of its population lives in cities.

## **Economics and Industry.**

Economics in Murmansk region is based on rich source of mineral and raw materials of the Kola peninsula, on biological resources of the Barents sea as well as on the deep-sea port of all-the-year round navigation with direct access to the World ocean. These factors have predetermined the way of the region development.

The large industrial complex was formed on the Kola Peninsula. The dominating position in the regional economics is occupied by the industrial production where 25 % of the working population is engaged, 27 % of capital assets are concentrated and it provides 97 % of export. The maximum portion in the structure of industrial production falls on mining and industrial complex, power engineering, fishing industry.

Murmansk region is one of the well-developed mining regions of Russia. The resources of most minerals have all-Russian importance, and of apatite and nefeline, kianite ores, rare metals – world importance. The characteristic feature of the mineral raw materials in the region is its complex composition. The mining complex of the region provides the considerable part of the country's demand in : phosphate ores, baddeleite and nefeline (100 %), phlogopite, vermiculite (80-90 %), iron ore concentrate (9%), in nickel, copper, cobalt, niobium, tantalum, ceramic raw material, rare-earth metal.

The region is reckoned among 20 subjects of the Russian Federation – the largest exporters of goods. The transition from the market transformations enabled the regional enterprises to use efficiently the chances provided by the world market.

## **Mining and Industrial Complex.**

The basis of Murmansk region industry constitutes Mining and industrial complex, consisting of the enterprises of mining and chemical industry, of ferrous and non-ferrous metallurgy, construction materials industry (OAO (Public joint stock company) Apatite”, OAO “Kolskaya Mining and Smelting company”, OAO “Kovdorsky GOK (Ore mining and processing enterprise)”, OAO SUAL “KAZ – SUAL”, OAO “Olenegorsky GOK”, OOO “Lovozersky GOK”, OAO “Kovdorosluda”

The total resources of ores being on the account of the state amount 7,3 bln.tons. The annual productivity of the regional enterprises is 60 mln.tons of ore. The total availability of resources estimates over 80 years.

The geological branch is represented by Geological institute KNC (Kola Scientific center) RAN (Russian Academy of science), by OAO “Central Kola expedition”, FGUP (Federal State unitary enterprise) “Arcticmorneftegazrazvedka”, OAO “Sevmorneftegeophysika”, OAO “Arctic Marine Engineering and Geological expeditions”, OAO “Marine Arctic Prospecting expedition”.

The discovery and prospecting of the following new deposits are considered to be the most important results of the work of Murmansk region geologists:

- South-Eastern Gremikha – ilmenite, titanium and magnetite ores deposit;
- chromite deposit in Sopcheozerskoye;
- deposit of platinum group metals (palladium, platinum, gold, copper and nickel ores) in Fedorovo and Pansky massif.

Large-scale prospecting of diamonds has been performed in all the territory of the region. The plans of forming Ore mining and processing enterprises based on the prospected resources of Fedorovsky deposit (platinum and metals, ZAO “Fedorova Resources”) and apatite and nefeline deposit in Oleny Ruchey (stream) (ZAO “North-Western Phosphor company”) have been declared.

One of the priorities in the activities of the regional Government is to support the constructive contacts with the largest industrial enterprises in the Kola Peninsula.

### **Heat and Power Complex.**

The nearest prospects in the economical growth, in strengthening the power security in Murmansk region as well as in Russia at all, are connected with the development of oil and gas fields in the shelf zone of the Western Arctic. One of the most important projects is the complex development of Stockman gas condensate field. Within this project apart from forming the new port complex, in the territory of Murmansk region it is planned to construct the plant of liquid gas production and lay down the route of land gas pipeline which shall be included into the United system of gas pipelines in the Russian Federation.

The development of heat and power complex in the region is in the first turn connected with the development of oil and gas fields in the shelf zone of the Western Arctic having the area over 2,6 mln. km<sup>2</sup>, covered with the waters of the Barents, Pechora and Kara seas. Exactly here, in the Arctic shelf, lie still virgin heat and power treasures of Russia of XXI century. The Power Strategy of the Development of Russia for the period till 2020 adopted by the RF Government says that the main production of hydrocarbon is planned on the basis of deposits of the Western Siberia, the Eastern Siberia and the continental shelf, in the first turn of the western part of the Arctic shelf of Russia.

Practically in all versions of the hydrocarbon fields development plan in the shelf of the Arctic seas, the Kola Peninsula stands as the basic region. It is not by accident. The favorable geographic position, well-developed infrastructure make the Kola Peninsula very attractive for placing the enterprises of material and technical supply for drilling works, for commercial exploitation of deposits, transportation of oil, gas and gas condensate, for mounting and repairs of platforms and equipment, for maintaining the fleet and social security measures with use of existing production capacities and manpower.

In November 2005 the Agreement on cooperation between Murmansk region Government and OAO “Gazprom” was signed. Taking into account the interest of the parties under it in developing mutually beneficial economic and scientific and technical cooperation on the long-term and stable basis, the Agreement determines the high priority trends of OAO “Gazprom” activities in the territory of Murmansk region including the preparatory measures aimed at implementing the program of developing oil and gas fields in the shelf of the Barents sea, including Stockman fields.

Murmansk region is reputed as one of the most power available territories of the RF. Its proportion constitutes 2 % of all electric power produced in the country. The power system of Murmansk region is represented by 17 hydro power stations united in 4 cascades, and the most northern Kola atomic power station. Kola power system annually produces over 16 mln. kilowatt-hours of energy, part of which is delivered to neighboring Karelia and exported to Finland and Norway.

### **Oil and Gas Complex in Murmansk Region.**

The primary total resources of the continental shelf of Russia estimate about 100 bln.tons in oil equivalent. The Western Arctic shelf contains about 75 % of all hydrocarbon resources of

the shelf of Russia and is considered as the strategic region for the development of oil and gas industry.

The development of the Arctic shelf deposits shall become one of the driving forces of Murmansk region development, the actual “locomotive” of its economic growth. Murmansk region Government makes all required steps to stimulate the works in the marine deposits.

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### **Transportation Complex. Sevmorput. (The Northern shipping route)**

The favorable geographical position and developed industry enabled the development of all types of transport and the roads network in the territory of the region. Available ground communications provide the traditional economic links with the other Russian regions and create optimal conditions for the expansion of cooperation with foreign countries.

Murmansk section of Oktjabrskaya railway – branch of OAO “RZhD” – has today 1046,7 km of ways, 50 stations, 18 enterprises, about 10 thousand employees.

OAO “Murmansk Shipping company” is the leading shipping company providing all-the-year-round transport servicing in the North shipping route.

Murmansk Marine Commercial port is the largest non-freezing port of Russia.

During the last years the considerable volume of works has been performed aimed at organizing new transshipment complexes for mineral fertilizers, apatite concentrate, alumina and coal. The bottom-deepening works has been accomplished due to which the port can serve the vessels with the deadweight exceeding 200 thous.tons.

The transshipment of hydrocarbon and oil products is executed by two coastal and three roadstead terminals.

The project “Complex development of Murmansk transport junction” is under realization.

Apart from Murmansk port, Kandalaksha Marine Commercial port and specialized Vitino port are operating all-the-year-round.

International lines operate in Murmansk aeroport.

Within 2001-2005 years there were carried out large-scale measures to enhance the efficiency and competitiveness of Murmansk transport junction. The reconstruction of Murmansk Commercial Sea port and bottom-deepening works in the Kola bay enabled to serve the vessels with the displacement exceeding 350 ths.tons. Not a single port in the European part of Russia has at its disposal such capacities. New transshipment complexes, oil terminals were launched here which enabled to increase the volume of cargo turnover in the regional ports, the volumes of transshipment and of oil transit for export.

### **Fishing Industry Complex**

The fishing industry of Murmansk region is one of the traditional ones in the region, which plays important socio-economic role in the region specialization. It takes the third-fourth place in the range of importance after minerals extraction, processing productions and power engineering. At present fishermen of Murmansk region provide about 20 % of all-Russian catch. As a matter of fact, every 4-5 ton of foodstuff in the domestic market is produced in Murmansk. The foundation of the branch is its fishing fleet which numbers about 270 marine sea-going vessels and up to 100 small vessels of offshore fishing, as well as coastal fish-processing factories, ship-repairing companies, port facilities. In general 12-14 thousand people are engaged in fishing industry (depending on the catching season). 85 companies are engaged in marine fishing, 56 companies – in offshore fishing, 45 companies – in fish-processing and over 20 – in

ship-repairing. The companies, firms, enterprises are united into 15 Professional public associations of the region on voluntary basis.

### **The Investment Attractiveness.**

Due to its geographical position, non-freezing deep-water port and considerable resources of minerals including oil and gas fields in the Arctic shelf, Murmansk region remains to be the interesting object for making investments.

The priority projects of the Federal significance are :

- realization of General schedule of the development of Murmansk transport junction,
- development of deposits in the Arctic shelf.

The largest existing investment projects in the region are :

- the development of ore and raw material base and technical retooling of processing complex OAO "Apatite";
- reconstruction and modernization of Murmansk Marine Commercial port;
- technical retooling of KAES-1 (Kola atomic power station);
- building the object 92 RTP "Atomflot": organizing the infrastructure for repairs in docks, providing nuclear and radiation security;
- reconstruction and expansion of OAO "Olkon"; drawing Komsomolsk deposits for processing; reconstruction of crushing and concentrating plant;
- technical retooling of Kovdor ore mining and processing enterprise;
- development of ore and raw material base, reconstruction and expansion of the enterprise OAO "Kolskaya GMK (mining and smelting company).

The unique advantages of the Kola Peninsula are :

- considerable sources of natural resources within the territory of the Peninsula and the shelf of the Arctic seas;
- availability of free capacities of electric power and the potential of highly qualified staff;
- availability of deep-water non-freezing port and open access to the World ocean;
- availability of safe and reliable railway, automobile and air connection with the industrial developed regions of Russia;
- free virgin (non-developed) territories on the western coast of the Kola bay which can be used for increase of port capacities;
- proximity of transport junction to the European, American and domestic markets;
- possibility to use international transport transit corridors – Northern shipping route (Sevmorput), Transsib and North-South (Sever-Ug);
- creation of favourable entrepreneur climate in the region in the interests of socio-economic development of Murmansk region.